REMARKS

The Office Action mailed May 9, 2008 has been carefully considered. Reconsideration in view of the following remarks is respectfully requested.

Claim Status and Amendment of the Claims

Claims 1-4, 9, 13, 21-24, 26-29, 45-48, 50, 52, 54, 55, 57-60 and 62-71 are currently pending.

No claims stand allowed

Claims 1-4, 13, 50, and 52 have been amended to further particularly point out and distinctly claim subject matter regarded as the invention. Support for these changes may be found in the specification, figures, and claims as originally filed.

Claims 5-8, 10-12, 14-20, 25, 30-44, 49, 51, 56, 61, and 72-74 were previously cancelled, without prejudice or disclaimer of the subject matter contained therein.

With this Amendment it is respectfully submitted the claims satisfy the statutory requirements.

The First 35 U.S.C. § 103 Rejection

Claims 1, 2, 13, 21, 26, 45, 54, 55, 58-60, and 63-71 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Perkins in view of Inoue tet al., 2 ("Inoue "819"), further in view of Martin et al., and further in view of Applicant's admitted prior art, among which claims 1, 21, 26 and 45 are independent claims. 4 This rejection is respectfully traversed.

According to the Manual of Patent Examining Procedure (M.P.E.P.),

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or

¹ U.S. Patent No. 5,159,592 to Perkins.

² U.S. Patent No. 6,891,819 to <u>Inoue et al.</u>

³ U.S. Patent No. 6,614, 788 to Martin et al.

⁴ Office Action at p. 2.

references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure ⁵

Claim 1

Claim 1 as presently amended recites:

A network access server (NAS), the NAS comprising:

- an HGS identifier configured to identify a home gateway server (HGS) of an Internet service provider (ISP), the HGS associated with a home domain to which a request for an IP address is to be transmitted, the ISP and a Network Access Provider (NAP) of the NAS being separate, wherein the HGS identifier is configured to identify the HGS responsive to log-in information provided by a user;
- an IP address requester configured to request an IP address from the HGS, the HGS maintaining a pool of IP addresses for allocation to authorized users, the IP address requester configured to transmit the user's authentication information to the HGS with the request for an IP address from the HGS;
- an IP address relayer configured to receive an IP address allocated to the user from the HGS and to relay the allocated IP address to the user; and
- a memory coupled with the IP address requester and the IP address relayer, the memory storing an association between an identification of the user and the IP address allocated to the user, the NAS configured to provide a user with access and connection to a global data communications internetwork.

The Examiner states.

- ... Perkins discloses a network access server (NAS) providing a connection to a user in a data communications network, said NAS being capable of communicating with a home gateway server (HGS), said NAS comprising:
- an HGS identifier (pseudo-network number) identifying an HGS to which the request for an IP address is to be transmitted wherein the home domain is distinct from a domain associated with said NAS (col. 8. lines 45-68):
- an IP address requester for requesting an IP address from the HGS (global Gateway or GW) on behalf of a user, without using a tunneling protocol, the HGS maintaining a pool of IP addresses for allocation to authorized users associated with the NAS (local Gateway or GVV) (e.g. abstract; Figures 2-5; col. 5, lines 50-65);
- an IP address relayer for receiving an IP address allocated to the user from the HGS and for relaying the allocated IP address to the user (mobile unit) (e.g. abstract; Figures 2-5; col. 5, lines 50-65); and
- a memory coupled with said IP address requester and said IP address relayer, said memory storing association between an identification of the user and the IP address allocated to the user (col. 5. lines 15-27).

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⁵ M.P.E.P § 2143.

Perkins does not the HGS identifier is responsive to log-in information provided by the user. In analogous art '819 discloses another network access server providing a user with access and connection to the internet wherein the HGS identifier (i.e. home agent 5) is responsive to log-in information provided by the user (i.e. mobile computer 2) (i.e. the user supplies "log-in information" such as the home agent identifier, which is then transmitted to the home agent server, and then authentication information is exchanged to authenticate the user) (col. 8, lines 44-49). It would have been obvious to one of ordinary skill in the art to combine the teaching of '819 with Perkins in order to allow the system of Perkins to be compatible with other networks, thereby increasing the range of the system as well as the customer base of which it can service, as well as authenticating an individual user who is operating the mobile computer when the mobile computer is connected to a visited site network and transmits a current location registration message to the home agent as supported by '819 (col. 2, lines 55-60).

Perkins in view of '819 do not specifically disclose the log-in information is transmitted with the request for an IP address, rather a challenge is sent to the mobile agent, and then a response with the log-in information is transmitted back to the server. In analogous art, Martin discloses another system for allocating IP addresses to users which utilizes a RADIUS server to receive a request for an IP addresses to users which utilizes a RADIUS server to receive a request for an IP address, with login information, which then authenticates the user, and if the user is authenticated, allocating an IP address for said user (Figure 1213; col. 7, lines 45-65). It would have been obvious to one of ordinary skill in the art to combine Martin with Perkins and '819 in order to reduce the number of messages sent in the system of '819, thereby reducing congestion on the network (i.e. instead of sending four separate messages, IP request, challenge, response, IP allocation, sending only two messages, IP request with password information, response). Perkins-'819-Martin do not explicitly disclose an ISP using a separate HGS; rather

rerains 819-Mattin do not expirately disclose an ISP using a separate FIGS, fauth discloses multiple networks, AAPA discloses an ISP and an HGS being separate both physically and organizationally (pages 1-2). It would have been obvious to one of ordinary skill in the art to combine the teaching of Perkins-819-Martin by incorporating the teaching of a separate ISP controlling each of the networks Ia-co f819, thereby increasing interoperability between users and allowing different ISP's to utilize each other's networks to provide connectivity to their subscribers.⁶

The Applicants respectfully disagree for the reasons set forth below.

As an initial matter, the Applicants note the Examiner refers to limitations not found in Claim 1. The Examiner refers to "an IP address requester for requesting an IP address from the HGS on behalf of the user, without using a tunneling protocol..." However, "from the user" and "without using a tunneling protocol are not found in Claim 1.

⁶ Office Action dated May 9, 2008, at ¶ 2.

Additionally, the Examiner mischaracterizes the "separate" limitation found in Claim 1 by stating "Perkins-'819-Martin do not explicitly disclose an ISP using a separate HGS, rather discloses multiple networks." However, Claim 1 recites in part "an HGS identifier configured to identify a home gateway server (HGS) of an Internet service provider (ISP), the HGS associated with a home domain to which a request for an IP address is to be transmitted, the ISP and a Network Access Provider (NAP) of the NAS being separate, wherein the HGS identifier is configured to identify the HGS responsive to log-in information provided by a user." Thus, Claim 1 requires that the ISP (which has a HGS) and the NAP of the NAS be separate. Thus, the limitations of Claim 1 are not found in the cited art of record.

Independent Claims 21, 26 and 45

Claim 21 is a method claim corresponding to non-means-plus-function claim 1. Claim 26 is an *In re Beauregard* claim corresponding to method claim 21. Claim 45 is a means-plus-function apparatus claim corresponding to method claim 21. Claim 1 being allowable, Claims 21, 26, and 45 must be allowable for at least the same reasons as for Claim 1.

Dependent Claims 2, 13, 54, 55, 63-66, and 68-70

As to dependent claims 2, 13, 54, 55, 63-66, and 68-70, the argument set forth above is equally applicable here. The base claims being allowable, the dependent claims must also be allowable.

The Second 35 U.S.C. § 103 Rejection

Claims 3, 9, 23, 28, 47, 57, and 62 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over <u>Perkins</u> in view of <u>Inoue '819</u>, further in view of <u>Martin et al.</u>, further in view of Applicant's admitted prior art, and further in view of <u>Holt et al.</u> § 9 This rejection is respectfully traversed.

⁷ Office Action at p. 4.

⁸ U.S. Patent No. 6,070,192 to Holt et al.

⁹ Office Action at p. 5.

As to dependent claims 3, 9, 23, 28, 47, 57 and 62, the argument set forth above is equally applicable here. The base claims being allowable, the dependent claims must also be allowable.

The Third 35 U.S.C. § 103 Rejection

Claims 4, 24 and 48 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over <u>Perkins</u> in view of <u>Inoue '819</u>, further in view of <u>Martin et al.</u>, further in view of Applicant's admitted prior art, further in view of <u>Holt et al.</u>, and further in view of <u>Inoue et al.</u>¹⁰ ("Inoue '616").¹¹ This rejection is respectfully traversed.

As to dependent claims 4, 24, and 48, the argument set forth above is equally applicable here. The base claims being allowable, the dependent claims must also be allowable.

The Fourth 35 U.S.C. § 103 Rejection

Claims 22, 27, 46 and 50 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over <u>Perkins</u>, further in view of <u>Inoue '819</u>, further in view of <u>Martin et al.</u>, further in view of Holt et al., and further in view of Reid.¹² This rejection is respectfully traversed.

As to dependent claims 22, 27, 46, and 50, the argument set forth above is equally applicable here. The base claims being allowable, the dependent claims must also be allowable.

Claims 45-48, 58-60, 62, 66, and 71

Claims 45-48, 58-60, 62, 66, and 71 are means-plus-function apparatus claims. In support of the 35 U.S.C. § 103 rejections of Claims 45-48, 58-60, 62, 66, and 71, the Examiner refers to substantially the same portions of the cited references used in the rejection of claims which are not means-plus-function apparatus claims, specifically Claims 1, 2, 3, 4, 9, 13, 21, 22, 23, 24, 26, 27, 28, 50, 54, 55, 57, 63-65, and 67-70. The Examiner is referred to the U.S. Patent and Trademark Office document entitled "Examination Guidelines For Claims Reciting A "Means or Step Plus Function" Limitation In Accordance With 35 U.S.C § 112, 6th Paragraph"

¹⁰ U.S. Patent No. 6,442,616 to Inoue et al.

Office Action at p. 7.

¹² U.S. Patent No. 6,233,616 to Reid.

("Guidelines"), a copy of which is submitted herewith for the Examiner's convenience. The Guidelines state:

- ... Per our holding, the 'broadest reasonable interpretation' that an examiner may give means-plus-function language is that statutorily mandated in paragraph six. Accordingly, the PTO may not disregard the structure disclosed in the specification corresponding to such language when rendering a Patentability determination
- ... [The] examiner shall interpret a § 112, 6th paragraph "means or step plus function" limitation in a claim as limited to the corresponding structure, materials or acts described in the specification and equivalents thereof in acts accordance with the following guidelines.13

The Guidelines state further:

... if a prior art reference teaches identity of function to that specified in a claim, then under Donaldson an examiner carries the initial burden of proof for showing that the prior art structure or step is the same as or equivalent to the structure. material, or acts described in the specification which has been identified as corresponding to the claimed means or step plus function. 14

As Claims 45-48, 58-60, 62, 66, and 71 of the present application are means-plus-function claims and Claims 1, 2, 3, 4, 9, 13, 21, 22, 23, 24, 26, 27, 28, 50, 54, 55, 57, 63-65, and 67-70 of the instant application are non-means-plus-function claims, they cannot be said to be drawn to identical subject matter. Furthermore, the Examiner has not shown for each means-plus-function claim, that the prior art structure or step is the same as or equivalent to the structure, material, or acts described in the specification which has been identified as corresponding to the claimed means or step plus function. Therefore, the Examiner has not established a prima facie case and the 35 U.S.C. § 103 rejection of Claims 45-48, 58-60, 62, 66, and 71 must be withdrawn.

In response to the Applicant's arguments, the Examiner states:

Applicant argues, in substance, that the rejection does not delineate the structures needed for claim 48, a means-plus-function claim. The Examiner disagrees. Applicant recites similar limitations but in an apparatus form using means-plusfunction language. The Examiner never stated the limitations were identical, rather similar in nature. Furthermore the passages cited of Perkins, '819, and Martin clearly show the structures of those particular apparatuses which meet the claimed limitations. Applicant has not pointed to any particular feature which is

^{13 &}quot;Examination Guidelines For Claims Reciting A "Means or Step Plus Function" Limitation In Accordance With 35 U.S.C § 112, 6th Paragraph," U.S. Patent and Trademark Office, http://www.uspto.gov/web/offices/pac/dapp/pdf/exmgu.pdf, p. 1. (emphasis added)

Guidelines at p. 3. (emphasis in original)

done only in a method of the cited references, therefore the cited references clearly demonstrate a structure to meet the claimed limitation.¹⁵

Again, the Applicants invite the Examiner to review the Examination Guidelines for Claims Reciting a "Means or Step Plus Function" Limitation in Accordance with 35 U.S.C. § 112, 6th Paragraph, by the U.S. Patent and Trademark Office. The Applicants have provided the Examiner with specific references to this Patent Office document, which clearly indicate what an Examiner must do to establish a *prima facie* case.

The Examiner incorrectly paraphrases the Applicant's argument by contending "Applicant argues, in substance, that the rejection does not delineate the structures needed for claim 48, a means-plus-function claim." Stated more simple terms, the Applicants respectfully submit the Examiner has not established a *prima facie* case with respect to means-plus-function apparatus claims 45-48, 58-60, 62, 66, and 71 because the Examiner has not shown for each means-plus-function claim, that the prior art structure is the same as or equivalent to the structure, described in the specification which has been identified as corresponding to the claimed means plus function. (emphasis added). The Applicants respectfully submit the Examiner cannot establish a *prima facie* case with respect to means-plus-function apparatus claims without referring to *any* structure in the specification, let alone structure in the specification corresponding to *each* claimed means plus function.

Additionally, the Applicants made the above argument in the Response mailed April 10, 2008, yet the Examiner's Response to Amendment regarding this issue is the same in the Office Action mailed January 10, 2008, and the Office Action mailed May 9, 2008. Considering that the Examiner has not provided any comments or rebuttal to the Applicant's argument, but only restated prior rejections, it can be assumed that the Examiner agrees to the Applicant's arguments and that the Claims are allowable. 17

¹⁵ Office Action mailed May 9, 2008 at ¶ 15; and Office Action mailed January 10, 2008 at ¶ 15.

¹⁶ Office Action at ¶ 15.

¹⁷ In re Herrmann, 26 I F.2d 598 (CCPA 1958) (The court noted that since applicant's arguments were not questioned by the examiner, the court was constrained to accept the arguments at face value and thus held the claims to be allowable); See In re Soni, 54 F.3d 746 (Fed. Cir. 1995).

Attorney Docket No.: CISCO-1818 (032590-091)

In view of the foregoing, it is respectfully asserted that the claims are now in condition

for allowance

Conclusion

It is believed that this Amendment places the above-identified patent application into

condition for allowance. Early favorable consideration of this Amendment is earnestly solicited,

If, in the opinion of the Examiner, an interview would expedite the prosecution of this

application, the Examiner is invited to call the undersigned attorney at the number indicated

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The Applicant respectfully requests that a timely Notice of Allowance be issued in this

case.

Please charge any additional required fee or credit any overpayment not otherwise paid or

credited to our deposit account No. 50-1698.

Respectfully submitted, THELEN LLP

Dated: September 9, 2008

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